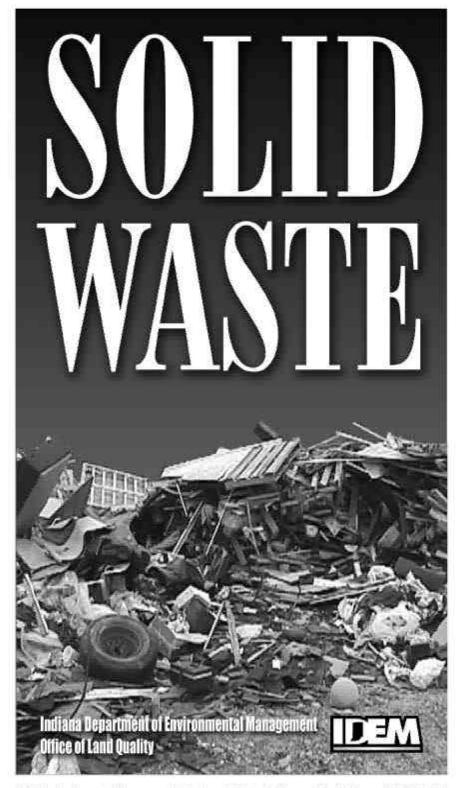
2002

Summary of Indiana Solid Waste Facility Data



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The 2002 Summary of Indiana Solid Waste Facility Data is the eleventh in the series of annual reports of solid waste facility activities in Indiana. The information is compiled from solid waste facility quarterly reports submitted to the Indiana Department of Environmental Management (IDEM). The IDEM Office of Land Quality publishes the 2002 Summary of Indiana Solid Waste Facility Data to provide information to the public about solid waste processing and disposal activities in Indiana. This report was prepared by staff of the Facilities Data Analysis Section.

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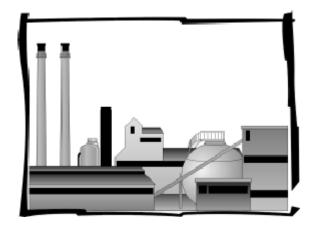
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Introduction

This report is the eleventh annual summary of Indiana's solid waste facility data. It is intended to provide information about Indiana's solid waste management. The report provides solid waste facility information for 2002 and contains:

- a summary of existing solid waste facilities;
- a summary of the amount, origin, and types of solid waste received at land disposal facilities and processing facilities; and
- a summary of out-of-state waste imports.



This report was compiled from the solid waste facility quarterly reports submitted to IDEM by owners and operators of facilities that manage non-hazardous solid waste. Rules passed by the Solid Waste Management Board require all solid waste land disposal facilities (329 IAC 10-14-1) and processing facilities (329 IAC 11-14-1) to submit information to IDEM on a quarterly basis describing the origin, type, and amount of solid waste received by these facilities. Processing facilities must also report the amounts and destinations of waste transported off-site for recovery or disposal. Reports submitted to IDEM are on file and available for public review.

This report emphasizes graphs, tables, and figures. Discussion text is included only as necessary to guide the reader through the report and to provide a context for the graphs and tables. Several sections that were included in previous releases of this report are not present in this year's report. Much of the information in these sections has been duplicated from year to year and/or is available in other IDEM publications. Table 1 shows how to obtain this information in addition to other information that may interest readers of this report.

Previous reports summarized municipal solid waste (MSW) landfill capacity from amounts reported by facilities or from estimates made by IDEM. Beginning in 1996, landfills were required by regulation to submit con-

tour maps annually based on surveys conducted between October 1 and December 31 of each year. IDEM uses this information to calculate accurate and precise totals for both airspace and waste capacity. See Table 1 for the IDEM contact for MSW landfill capacity data for 1997 through 2002.

Prior to 1996, facilities reported non-municipal waste only as Construction-Demolition Waste and Special/Other Waste. In

1996, IDEM added categories for Special Waste, which included Foundry Wastes and Other Special Wastes, for Coal Ash, and for Flue Gas Desulfurization by-products. Legislation enacted since the beginning of the period covered by the 2000 Summary of Indiana Solid Waste Facility Data report eliminated Special Waste as a classification. To reflect this, Foundry Wastes, which was previously under Special Waste, is retained as a separate category under its own name. Other Special Wastes is no longer a separate sub-category. Any waste previously classified as Special Waste or Industrial Waste that does not fit any of the existing available categories is reported now under the category Other Waste. Coal Ash and Flue Gas Desulfurization are retained as classifications. Because of the changes in classification types through the years covered by the 2002 Summary of Indiana Solid Waste Facility Data report, information for disposal by waste type by year will continue to be grouped as municipal waste and non-municipal waste to make comparisons among years meaningful.

Table 1. **Sources of Solid Waste Data**

nformation Available	Description	Contact
and disposal facility juarterly reports	Origin, type, and tonnage of solid waste received. *	Michelle Weddle (317) 233-4624
Processing facility quarterly reports	Origin, type, and tonnage of solid waste received and destination information. *	Michelle Weddle (317) 233-4624
Composting facility annual reports	Type and volume of compost received and processed. *	Michelle Weddle (317) 233-4624
ransfer station inspection innual reports	Results from inspections of incoming waste.	Marcia Earl (317) 308-3016
Vaste tire storage facility processors and transporters annual reports	On-site summary of incoming and outgoing tires.	Debby Baker (317) 232-0066
Tire dump sites and inspections of waste tire management operations	Information on illegal tire dump sites and progress of clean-up operations.	Anne Weinkauf (317) 308-3019
funicipal waste ransportation manifests	Waste generation, transportation, and disposal information that accompanies waste from processing facilities for final disposal.	Debby Baker (317) 232-0066 or Richard Worth (317) 233-5156
ndiana MSW landfill disposal apacity reports	Remaining air space and disposal space at Indiana land disposal facilities.	Richard Worth (317) 233-5156
Solid waste management fee eports (IDOR)	Monthly reports showing fees collected for solid waste disposed at final disposal facilities.	Rachel Ballard (317) 615-2590
Solid waste disposal fee eports (IDEM)	Semi-annual reports showing fees collected for the disposal of specific types of solid waste.	Pat Beeler (317) 233-0408
Solid waste management district unnual reports	Information on district programs and activities.	Monica Hartke-Tarı (317) 233-5431
ndiana solid waste liversion information	Calculations of amounts of waste estimated diverted from final disposal by reuse and recycling*	Michelle Weddle (317) 233-4624
Permitted solid waste facilities st	List of permitted solid waste facilities in Indiana.*	Debby Baker (317) 232-0066
/ISW haulers list	List of registered MSW transporters.*	Debby Baker (317) 232-0066

^{*} Online search and/or data download available at: http://www.IN.gov/idem/land/sw/index.html



Solid Waste Data Framework

Several factors must be considered when discussing solid waste disposal in Indiana:

- type and quantity of the waste disposed;
- type and ownership of the facility that received the waste; and
- origin of the waste received.

The following pages give an overview of key concepts necessary for understanding solid waste disposal data.

Solid Waste Types

Solid waste can be categorized broadly as either hazardous waste or non-hazardous waste. This report deals only with non-hazardous waste, which can be further broken down into municipal solid waste and all other non-hazardous solid waste. Municipal solid waste, or MSW, is any solid waste generated by community activities or the operation of residential or commercial establishments (329 IAC 10-2-115). Prior to 1996, non-hazardous waste that is not MSW was subdivided into construction-demolition debris, special waste, and other non-municipal waste types. In 1996, the categories foundry, coal ash, and flue gas desulphurization (FGD) waste were added to provide more detailed waste information. Legislation enacted since the beginning of the period covered by the 2000 Summary of Indiana Solid Waste Facility Data report eliminated Special Waste as a classification, as discussed in the Introduction to this report. Figure 1 shows the current solid waste categories. Table 2 provides more detailed explanations of these waste types.

Solid Waste Facilities

Solid waste facilities in Indiana fall into two broad permit categories: land disposal facilities and processing facilities. Land disposal facilities are subdivided further into four types: municipal solid waste landfills, construction-demolition sites, restricted waste sites (types 1 through 4), and non-municipal solid waste landfills. Solid waste processing facilities permitted by IDEM can be incinerators, transfer stations, solid waste balers, solid waste shredders, resource recovery systems, or garbage grinding facilities (329 IAC 11-2-43). Table 3 summarizes the number of permitted solid waste facilities that submitted data reports to IDEM during 2002. Table 4 describes the types of waste each facility type may receive.

Land Disposal Facilities

Municipal solid waste landfills (MSWLFs) can accept a wide range of solid wastes disposed from residential, commercial, institutional, and industrial sources, except hazardous waste regulated under 329 IAC 3.1. Of the four landfill types, only MSWLFs can accept municipal solid wastes (Table 4).

Construction-demolition sites accept only construction or demolition waste materials (329 IAC 10-9-3).

Figure 1.

Current Solid Waste Catagories for Facility Quarterly Reports

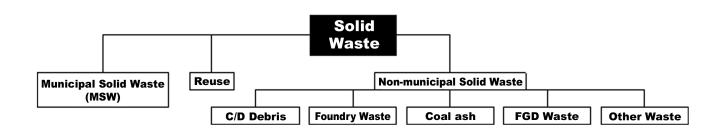


Table 2. Solid Waste Classification Guide

TYPE	GENERAL CATEGORIES	EXAMPLES					
Municipal Solid Waste (MSW)	Residential - Single- and multi-family units - Other (campgrounds, parks, etc.) Commercial - Retail and wholesale - Service industry Institutional - Prisons, hospitals, schools, and universities - Government sector Industrial non-process - Offices, lunchrooms, restrooms	 Consumer goods Packaging wastes Food wastes Office wastes Yard trimmings / vegetation Appliances Automobile parts Rinsed pesticide containers Small animal carcasses Household medical wastes Household hazardous wastes (includes oil, batteries, etc.) 	 Treated infectious waste Medical wastes Waste tires Used pallets Cardboard Furniture Exempt other wastes (generated by a single generator in quantities less than 100 kilograms per month and dispose of in quantities less than 100 kilograms per shipment) CESQG wastes 				
C/D Debris	Construction / Demolition - Construction industry - Demolition companies	- Uncontaminated solid waste resulting from the construction, remodeling, repair or demolition of structures; e.g., scrap lumber, wallboard - Roofing materials - Plumbing and electification fixtures - Bricks, concrete, - Non-asbestos ins					
Foundry	Foundry Waste	- Waste sand, slag, sludge, core waste, dust fines, etc.					
Coal Ash	Coal Ash	Coal ashFly ash, bottom ash, etc.Ash resulting from the combustion of coal					
FGD Waste	Flue gas desulfurization byproducts	- Scrubber / FGD sludge - Pollution control sludges resulting from	n coal combustion				
Other	Other -Any other non-municipal solid waste not classified as C/D Debris, Foundry, Coal Ash, or FGD Waste.	 Manufacturing process wastes (resins, oxides, non-coal combustion sludges, etc.) Asbestos-containing wastes Pollution control, spill clean-up wastes 	- Oil/gas/mining wastes - Incinerator residues - Low-level PCB wastes - Railroad ties				
Reuse (landfills only)	Reuse -Waste utilized for construction in a landfill	- Alternate daily cover - Road construction	-Leachate collection system construction -Landscaping mulch				

CESQG = conditionally exempt small quantity generator PCB = polychlorinated biphenyl FGD = flue gas desulfurization

Table 3.

Number of Permitted Solid Waste Facilities Operating During 2002

A. Land Disposal Facilities	B. Processing Facilities				
Municipal Solid Waste Landfills 37	Solid Waste Incinerators ⁽⁴⁾	3			
• Privately Owned 27 • Publicly Owned(1) 10	 Hospital⁽⁵⁾ Municipal Industrial⁽⁵⁾ 	1 1 1			
Construction-Demolition Sites ⁽²⁾ Restricted Waste Sites ⁽³⁾ Non-municipal Solid Waste Landfills ⁽²⁾ 3	Transfer Stations • Privately Owned • Publicly Owned	59 45 14			
TOTAL 68	TOTAL	62			
Includes Belmont Ash Monofill which receives municipal incinerator ash. Most facilities are captive sites.	(2) Some facilities are captive sites.(4) Incinerators designed to accept at least ten tons so	lid			
(3) Most facilities are captive sites.(5) All facilities are captive sites.	waste or seven tons infectious waste per day.				

Table 4.

Types of Land Disposal Facilities and Incinerators

A. Land Disposal Facilities

i 		
Туре	Acceptable Wastes	Data reported to IDEM
Municipal Solid Waste Landfill	Municipal waste, construction-demolition debris, other non-municipal wastes	Yes
Construction-Demolition Site	Construction-demolition debris only (unless otherwise approved by IDEM)	Yes
Restricted Waste Site	Non-municipal waste(s) specified in permit	Yes
Non-municipal Solid Waste Landfill	Wastes other than residential and commercial wastes	Yes

B. Incinerators

Туре	Acceptable Wastes	Data reported to IDEM
Large solid waste	Municipal waste, construction-demolition debris, other non-municipal wastes	Yes
Small solid waste(1)	Municipal waste, construction-demolition debris, other non-municipal wastes	No
Large infectious waste	Infectious waste (may also accept certain non-infectious waste)	Yes
Small infectious waste(2)	Infectious waste (may also accept certain non-infectious waste)	No
	(1) Incinerators designed to accept less than 10 tons per of	day (329 IAC 11-19-2).
	(2) Incinerators designed to accept less than 7 tons per d	ay (329 IAC 11-19-2).

Restricted waste sites can accept only materials specified in their landfill permits as determined by the classification criteria in 329 IAC 10-9-4. Coal combustion by-products comprise the largest portion of the waste tonnage disposed at restricted waste sites.

Like restricted waste sites, **non-municipal solid waste** landfills can accept only materials specified in their landfill permits. But non-municipal solid waste landfills have more stringent design standards than restricted waste sites. Most of Indiana's non-municipal solid waste landfills are currently captive facilities and therefore, are not available for public use.

In addition to the facility standards discussed here, each individual site may dispose of other materials not included in the above definitions according to its permit.

Processing Facilities

The term *incinerator* is defined broadly as an engineered facility designed to burn solid waste under controlled conditions. As Table 4 shows, incinerators in Indiana are categorized and regulated as either **solid waste incinerators** or **infectious waste incinerators**.

Solid waste incinerators with a design capacity of at least 10 tons per day and infectious waste incinerators with a design capacity of at least 7 tons per day must obtain a solid waste permit under Indiana solid waste rules 329 IAC 11-9 and 329 IAC 11-17. Other incinerators must notify IDEM and comply with certain operational requirements as stated in 329 IAC 11-19-2 and are deemed to be permitted.

Although incinerators are permitted and regulated under the category of processing facilities, they are considered to be final disposal facilities for planning and disposal fee purposes, as evident in statutory language. The disposal reduction goal language of P.L. 10-1990 also categorizes incineration as a final disposal method.

A **transfer station** is a facility at which solid waste is transferred from a vehicle or container to another vehicle or container for transportation purposes (329 IAC 11-2-47). Transfer stations may manage materials in other ways according to their individual permits. For example, activities at a permitted transfer station may involve only the consolidation

of waste loads for further transport, or may also incorporate some form of materials recovery, during which recyclables are segregated for recycling or reuse.

Tire, paper, and medical waste processing sites also are defined as processing facilities by statute; however, no such facilities were in operation during 2002.

Accuracy of Facility Reports

IDEM conservatively estimates that municipal solid waste tonnages may be over-reported by 20 to 40 percent due to some loads of municipal solid waste being mixed with non-municipal solid waste but identified only as municipal solid waste. According to studies in other states, construction-demolition wastes alone can constitute as much as one-third of municipal solid waste. The portion of municipal solid waste that is actually other non-municipal waste is unknown. Because of these uncertainties, caution should be used when attempting to draw conclusions regarding exact amounts of particular waste types.

Municipal Solid Waste Landfill Ownership

Since the facility quarterly report program began in 1991, more of Indiana MSW landfills have been owned privately than owned publicly (Table 3). Figure 2 shows the percentages of private and public ownership of MSW landfills in 2002.

Most construction-demolition sites and restricted waste sites are privately owned. About seventy-seven percent of Indiana's transfer stations and other permitted processing facilities are privately owned.

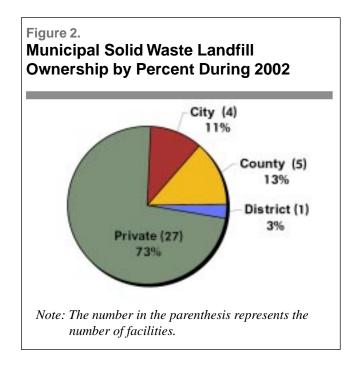


Figure 3.

Waste Disposal Pathways

Origin of Waste

Origin of waste can be broken down by state and by county. A discussion of out-of-state waste is provided beginning on page 27.

Determination of the point of origin of waste by county is difficult due to the manner in which waste is collected and transported to landfills. Waste collection vehicles may transport the waste directly to a landfill and the hauler will report to the landfill operator the county of origin. If the waste collection routes include more than one county as points of origin, the hauler is required to report an estimated percentage of waste for each county to the landfill owner/operator. Furthermore, IDEM guidance instructs land disposal facilities to list the origin of waste received from transfer stations as the county in which the transfer station is located. The extent to which this actually occurs, however, is unknown.

Some waste collection vehicles transport waste to a transfer station, where the hauler is required to report the county (or counties) of origin. The waste received at the transfer station may be commingled with waste from other waste collection vehicles. All or part of the commingled waste may then go to one or more landfills, incinerators, transfer stations, or recycling/processing facilities, where the origin typically is reported as being the county in which the transfer station is located. Figure 3 illustrates the variety of paths that waste can take after it is collected.

In summary, the county identified on some quarterly reports may not be the point of origin, but in fact a transfer point for the waste before it is delivered to the landfill. Table 5 lists estimated amounts disposed at Indiana facilities by county of origin.

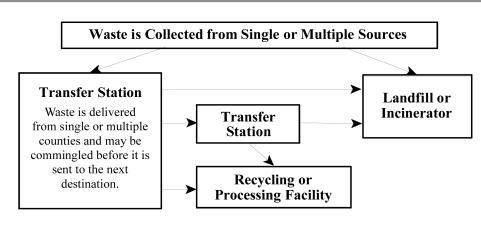


Table 5. Waste Tons Disposed in Indiana¹, by Estimated County of Origin

County	1994	1995	1996	1997	1998	1999	2000	2001	2002
Adams	33,250	38,558	82,755	49,022	46,997	46,647	35,183	31,835	36,833
Allen	501,093	492,171	497,446	550,552	528,523	532,067	563,565	529,213	475,877
Bartholomew	168,223	167,021	160,957	173,275	168,594	170,936	168,640	138,449	144,879
Benton	3,087	1,642	1,844	1,900	2,199	2,429	1,768	2,342	2,179
Blackford	18,360	20,732	24,642	27,374	48,542	30,049	18,025	15,813	17,597
Boone	86,576	89,008	76,167	82,072	66,424	88,067	79,787	67,908	82,369
Brown	6,527	6,547	5,475	5,318	4,320	7,414	5,680	5,009	4,240
Carroll	12,487	16,707	20,003	23,776	19,773	22,294	21,530	24,437	21,492
Cass	70,565	37,950	44,121	43,908	52,297	46,347	44,244	58,014	44,333
Clark	75,895	82,523	84,029	89,442	95,526	81,612	98,511	89,357	79,744
Clay	16,284	16,472	19,986	22,152	22,960	27,370	28,258	19,236	22,715
Clinton	51,099	34,023	102,352	47,383	45,816	40,673	49,343	48,602	48,716
Crawford	3,336	2,310	2,108	2,040	5,744	4,716	1,412	1,299	1,361
Daviess	27,553	22,514	26,375	27,404	30,214	26,620	33,003	24,943	23,028
De Kalb	105,196	118,703	134,506	158,921	170,934	130,392	151,427	139,531	152,390
Dearborn	8,271	2,892	1,097	2,230	2,363	2,047	9,124	895	1,555
Decatur	24,675	25,690	26,493	25,927	26,226	26,186	28,521	31,507	30,840
Delaware	150,559	146,606	153,445	152,903	156,084	126,859	154,664	139,272	154,054
Dubois	45,834	45,760	48,633	41,479	42,606	48,287	57,241	58,420	37,615
Elkhart	427,389	396,768	403,842	418,501	436,867	501,018	413,623	396,569	373,738
Fayette	19,835	15,971	15,214	15,240	11,949	17,294	17,493	17,969	19,224
Floyd	79,036	71,948	75,227	67,047	55,835	58,657	56,326	49,136	32,263
Fountain	15,829	151,202	58,611	80,733	58,391	44,248	44,952	54,349	55,323
Franklin	4,203	349	4,526	5,235	4,104	4,300	5,468	7,804	6,532
Fulton	22,472	23,148	25,720	30,168	45,105	50,356	39,723	34,502	25,096
County	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gibson	539,368	761,712	674,664	868,292	1,743,917	945,627	1,038,734	1,102,377	1,212,387
Grant	61,195	84,441	75,684	89,656	83,442	104,116	86,924	91,298	82,840
Greene	18,870	20,420	25,107	18,448	20,543	23,605	24,112	21,758	25,024
Hamilton	154,743	155,356	132,530	155,769	232,712	261,592	168,933	164,178	197,831
Hancock	27,149	29,239	48,941	100,261	110,809	115,518	120,722	103,938	121,638
Harrison	1,459	66	115	24	112	314	473	1,825	3,080
Hendricks	106,710	136,330	151,369	130,399	126,982	141,111	151,346	144,364	190,277
Henry	81,476	88,945	101,482	92,410	94,261	76,231	62,868	65,101	66,298
Howard	142,633	94,813	145,134	158,536	169,044	157,698	188,929	161,842	140,215
Huntington	51,821	52,858	49,907	39,284	38,921	38,263	41,292	62,478	61,618
Jackson	68,799	71,755	69,183	55,372	57,475	55,609	59,808	58,622	61,142
Jasper	481,436	485,459	441,459	142,311	159,756	166,873	168,003	163,210	174,913
Jay	20,176	23,164	21,791	22,599	54,742	47,752	23,032	25,997	32,009
Jefferson	299,461	227,992	200,642	95,900	63,526	69,832	126,774	111,541	144,881
Jennings	13,341	16,118	16,903	18,747	21,175	20,760	19,987	23,374	21,987
Johnson	74,928	81,456	100,369	155,967	155,694	149,403	161,435	176,820	186,809
Knox	90,257	72,336	40,287	68,449	53,088	52,723	60,216	67,999	56,611
Kosciusko	169,080	198,453	223,056	243,412	241,978	232,641	226,065	203,843	177,684
Lagrange	23,055	19,776	25,069	26,265	50,329	35,700	32,846	36,015	38,842
Lake	574,747	770,020	910,783	769,061	930,599	1,115,650	1,100,952	1,099,149	1,112,574
La Porte	137,563	156,527	140,152	149,638	134,509	124,388	128,926	110,455	141,069

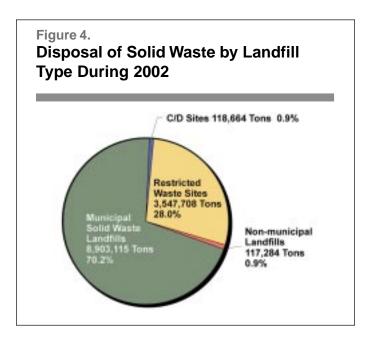
County	1994	1995	1996	1997	1998	1999	2000	2001	2002
Madison	150,131	162,515	180,448	182,565	173,774	176,554	171,067	187,423	169,789
Marion	1,478,486	1,498,477	1,409,899	1,432,887	1,341,364	1,446,384	1,556,981	1,722,697	1,621,430
Marshall	81,153	86,040	73,941	81,075	91,128	97,866	97,969	83,882	87,323
Martin	5,150	9,811	7,798	7,898	16,886	19,298	14,916	15,899	18,136
Miami	22,219	34,860	28,231	28,471	32,925	41,634	42,320	43,549	37,493
Monroe	105,813	108,008	114,993	128,903	137,838	134,706	137,420	141,150	147,720
Montgomery	61,206	58,368	47,743	78,910	158,463	234,947	168,214	81,208	170,940
Morgan	19,172	29,448	49,670	41,391	49,879	49,548	65,400	58,946	60,120
Newton	14,638	13,021	18,355	17,910	13,727	12,638	12,616	13,313	11,907
Noble	51,763	45,305	47,762	82,792	140,173	113,300	114,368	97,152	86,829
Ohio	790	245	118	67	51	357	250	65	53
Orange	18,942	15,314	15,814	17,750	18,034	14,938	19,162	19,457	17,902
Owen	13,889	14,381	13,598	13,791	8,131	8,436	9,817	10,894	14,026
Parke	8,132	7,261	9,567	16,589	11,682	8,887	11,278	11,050	9,494
Perry	6,574	2,546	3,806	45,736	77,801	130,014	152,844	143,950	166,205
Pike	466,114	600,831	387,362	605,544	520,868	101,361	18,273	17,701	18,299
Porter	105,189	65,748	80,347	78,998	80,199	95,070	106,677	107,780	93,501
Posey	363,826	359,114	380,047	441,333	437,653	378,171	288,486	304,732	297,264
Pulaski	7,585	8,470	9,260	7,654	8,283	7,401	6,443	7,239	8,768
Putnam	29,689	29,756	36,454	30,472	28,944	29,539	36,378	37,544	33,995
Randolph	27,086	28,514	29,113	30,653	34,377	30,899	24,829	45,917	26,942
Ripley	21,096	17,977	12,872	13,219	12,123	12,952	11,593	8,610	12,237
Rush	37,167	39,091	30,802	20,262	30,453	36,719	26,615	25,008	26,713
County	1994	1995	1996	1997	1998	1999	2000	2001	2002
Scott	13,135	17,975	18,640	20,225	21,502	23,583	24,788	20,684	20,778
Shelby	62,028	64,486	84,071	100,964	100,517	104,384	113,831	106,111	111,123
Spencer	38,154	28,842	46,680	15,702	203,585	145,984	207,722	240,580	178,226
St. Joseph	256,973	248,902	241,115	253,189	232,307	200,874	217,838	207,146	176,815
Starke	19,238	13,697	14,544	14,593	11,985	9,294	8,203	5,888	7,672
Steuben	22,100	24,784	24,392	21,593	19,600	26,263	26,925	27,857	28,580
Sullivan	844,348	811,767	1,008,275	1,016,140	948,650	905,662	948,941	923,428	865,330
Switzerland	3,724	3,331	1,026	1,953	1,768	1,988	1,239	2,880	4,479
Tippecanoe	187,477	179,664	240,651	176,748	187,132	164,502	204,184	201,480	208,180
Tipton	12,998	14,802	13,039	14,092	12,267	16,906	12,555	13,843	16,417
Union	2,363	1,684	1,734	1,124	482	1,537	2,168	2,253	2,525
UNKNOWN	627	433	0	0	0	0	0	0	0
Vanderburgh	250,753	286,095	237,839	242,216	239,678	249,633	252,567	270,480	265,421
Vermillion	41,297	38,601	46,740	36,429	37,872	35,210	36,423	29,642	30,882
Vigo	226,194	225,832	213,793	202,182	206,839	229,081	212,474	191,523	188,441
Wabash	255,920	217,760	207,042	233,976	274,892	256,013	215,805	231,323	179,477
Warren	1,047	146	371	96	280	1,299	416	235	1,988
Warrick	49,010	44,989	42,168	45,379	49,245	45,359	43,342	53,035	51,009
Washington	18,085	18,317	19,364	18,189	20,782	19,949	28,020	32,517	23,174
Wayne	113,912	94,583	90,740	87,538	94,227	87,871	80,310	81,963	76,149
Wells	40,101	37,010	30,126	28,472	31,396	25,950	21,800	20,652	19,688
White	28,603	27,499	32,240	32,436	29,958	26,294	28,709	27,874	27,163
Whitley	51,687	27,419	28,341	16,540	10,354	14,770	21,797	17,238	26,293

¹ Note: The information in Table 5 reflects the amount of waste from each county that was disposed of in an Indiana final disposal facility, either by direct haul or through an Indiana transfer station. It does not include waste disposed out-of-state, which explains the low amounts reported for counties near state lines. 1993 data can be viewed in the 2001 Solid Waste Annual Report.

Solid Waste Land Disposal Facilities

The data in this annual summary reflect the information provided in the solid waste facility quarterly reports submitted to IDEM. There may be some differences between the numbers published in this summary report and previously published annual reports. These differences are due primarily to improvements in the data quality checks made by IDEM Office of Land Quality.

Table 6 displays the amount of solid waste disposed at Indiana land disposal facilities by each reported waste type during 2002. Figure 4 displays this information by landfill type,



on page 24 in the chapter on processing facilities.

Table 6.

Disposal of Solid Waste by Landfill Type and Waste Type During 2002

Figure 5. Disposal of Solid Waste by Waste Type During 2002 C/D Debris 667,604 5.3% Coal Ash 761,246 Ton 6.0% TOTAL **FGD Waste** 12,686,771 Tons 1,961,348 Tons 15.5% Foundry 966,194 Tons 7.6% Other Non-MSW 1,525,746 Tons 12.0%

and Figure 5 by waste type, both as percentages of total. Table 7 displays totals of solid waste disposed at Indiana land disposal facilities from 1994 through 2002 for municipal waste and all other waste types grouped as non-municipal waste. Table 8 shows the same information as Table 7 but excludes direct imports to Indiana landfills. Due to reporting limitations, waste originating outside Indiana that is brought into the state through an in-state transfer station and disposed in an Indiana landfill cannot be excluded from the quantities in Table 8. Figure 6 shows the municipal waste, non-municipal waste, and total disposal figures for all landfills in Tables 7 and 8 in graph form to more clearly depict disposal trends year-to-year.

Waste received at solid waste incinerators is discussed

Tons of Waste Disposed

	Total of Madio Biopodoa											
Waste Type	Municipal Solid Waste Landfills	Construction/ Demolition Sites	Restricted Waste Sites	Non-Municipal Solid Waste Landfills	All Landfills							
Municipal	6,804,633	0	0	0	6,804,633							
C/D Debris	548,940	118,664	0	0	667,604							
Coal Ash	10,789	0	750,457	0	761,246							
FGDWaste	0	0	1,961,348	0	1,961,348							
Foundry	143,309	0	822,885	0	966,194							
Other NonMSW	1,395,444	0	13,018	117,284	1,525,746							
TOTAL	8,903,115	118,664	3,547,708	117,284	12,686,771							

Table 7.

Annual Disposal at Solid Waste Land Disposal Facilities by Landfill Type and Waste Type (Includes waste imports to Indiana)

Landfill Type	Waste Type	Tons of Waste Disposed								
		1994	1995	1996	1997	1998	1999	2000	2001	2002
Municipal	MSW	5,403,287	5,461,501	6,217,748	6,959,493	7,233,635	6,634,100	6,928,077	6,937,485	6,804,633
Solid Waste	NonMSW	1,820,890	2,277,583	2,506,843	2,757,504	2,901,949	2,821,091	2,331,200	2,328,151	2,098,482
Landfills	TOTAL	7,224,177	7,739,084	8,724,591	9,716,997	10,135,584	9,455,191	9,259,277	9,265,636	8,903,115
Construction/	_	0	0	0	0	0	0	0	0	0
Demolition	NonMSW	156,718	144,773	212,453	187,725	195,723	229,010	146,536	127,680	118,664
Sites	TOTAL	156,718	144,773	212,453	187,725	195,723	229,010	146,536	127,680	118,664
Restricted Waste	MSW NonMSW	0 3,431,672	0 3,828,695	0 3,824,287	0 3,740,680	0 4,689,484	0 3,438,190	0 3,525,067	0 3,551,753	0 3,547,708
Sites	TOTAL	3,431,672	3,828,695	3,824,287	3,740,680	4,689,484	3,438,190	3,525,067	3,551,753	3,547,708
-						.,,		-,,		
Nonmunicipal	MSW	0	0	579	0	0	0	0	4,381	0
Solid Waste	NonMSW	31,863	31,441	28,271	34,016	41,264	71,131	140,201	70,468	117,284
Landfills	TOTAL	31,863	31,441	28,850	34,016	41,264	71,131	140,201	74,849	117,284
All Landfills	MSW	5,403,287	5,461,501	6,218,327	6,959,493	7,233,635	6,634,100	6,928,077	6,941,866	6,804,633
	NonMSW	5,441,143	6,282,492	6,571,854	6,719,925	7,828,420	6,559,422	6,143,004	6,078,052	5,882,138
	TOTAL	10,844,430	11,743,993	12,790,181	13,679,418	15,062,055	13,193,522	13,071,081	13,019,918	12,686,771

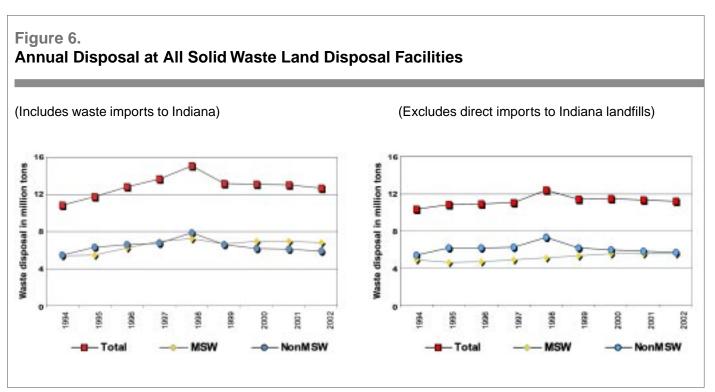


Table 8.

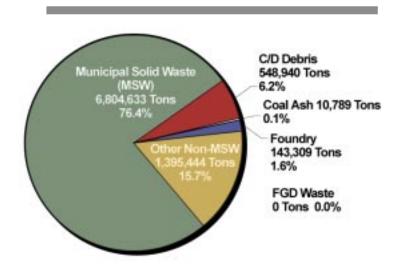
Annual Disposal at Solid Waste Land Disposal Facilities by Landfill Type and Waste Type (Excludes direct imports to Indiana landfills)

Landfill Type	Waste Type		Tons of Waste Disposed							
		1994	1995	1996	1997	1998	1999	2000	2001	2002
Municipal	MSW	4,902,171	4,620,376	4,696,297	4,858,656	5,080,056	5,297,116	5,515,530	5,546,617	5,555,518
Solid Waste	NonMSW	1,785,856	2,195,249	2,195,206	2,275,083	2,407,182	2,439,624	2,166,705	2,053,755	1,902,596
Landfills	TOTAL	6,688,027	6,815,625	6,891,503	7,133,739	7,487,238	7,736,740	7,682,235	7,600,372	7,458,114
Construction/	MSW	0	0	0	0	0	0	0	0	0
Demolition	NonMSW	153,421	137,998	135,055	148,257	166,489	205,432	144,976	126,264	97,236
Sites	TOTAL	153,421	137,998	135,055	148,257	166,489	205,432	144,976	126,264	97,236
Restricted	MSW		0	0	0	0	0	0	0	0
Waste	NonMSW	3,431,672	3,828,695	3,824,287	3,740,680	4,689,484	3,438,190	3,525,067	3,551,753	3,547,708
Sites	TOTAL	3,431,672	3,828,695	3,824,287	3,740,680	4,689,484	3,438,190	3,525,067	3,551,753	3,547,708
Nonmunicipal	MSW	0	0	579	0	0	0	0	4,381	0
Solid Waste	NonMSW	31,863	31,441	28,271	34,016	38,860	49,300	139,966	67,739	112,793
Landfills	TOTAL	31,863	31,441	28,850	34,016	38,860	49,300	139,966	72,120	112,793
All Landfills	MSW	4,902,171	4,620,376	4,696,876	4,858,656	5,080,056	5,297,116	5,515,530	5,550,998	5,555,518
	NonMSW	5,402,812	6,193,383	6,182,819	6,198,036	7,302,015	6,132,546	5,976,714	5,799,511	5,660,333
	TOTAL	10,304,983	10,813,759	10,879,695	11,056,692	12,382,071	11,429,662	11,492,244	11,350,509	11,215,851

Municipal Solid Waste Landfills

Most questions about land disposal facilities deal primarily with municipal solid waste (MSW) land-fills. MSW landfills receive waste materials from residences, businesses, institutions, and industries. As a result of the wide range of waste types these landfills receive, they are built to more stringent landfill design criteria than, for example, a construction-demolition site that accepts only construction-demolition wastes. Figure 7 breaks down the amounts disposed at MSW landfills by waste type shown in Table 6 as a percentage of total.

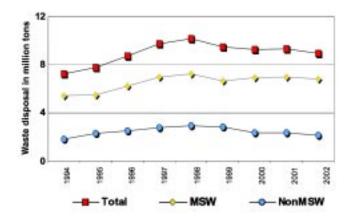
Figure 7.
Disposal of Solid Waste at Municipal Solid Waste Landfills by Waste Type During 2002



Annual Disposal at Municipal Solid Waste Landfills

(Includes waste imports to Indiana)

(Excludes direct imports to Indiana landfills)



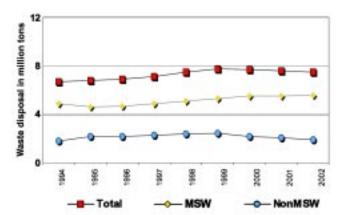


Figure 8 shows the municipal waste, non-municipal waste, and total disposal figures for MSW landfills in Tables 7 and 8 in graph form, similarly to Figure 6, which shows this for all landfills. Again, this is to more clearly depict disposal trends year-to-year.

Figure 9 shows the disposal of out-of-state waste vs. Indiana waste at MSW landfills. A more detailed discussion of out-of-state waste is provided beginning on page 27.

Figure 9.
Annual Disposal at Municipal Solid Waste Landfills by Waste Origin

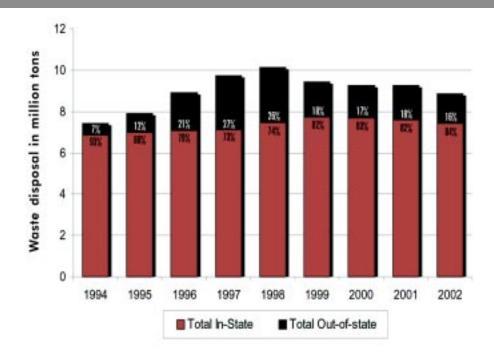
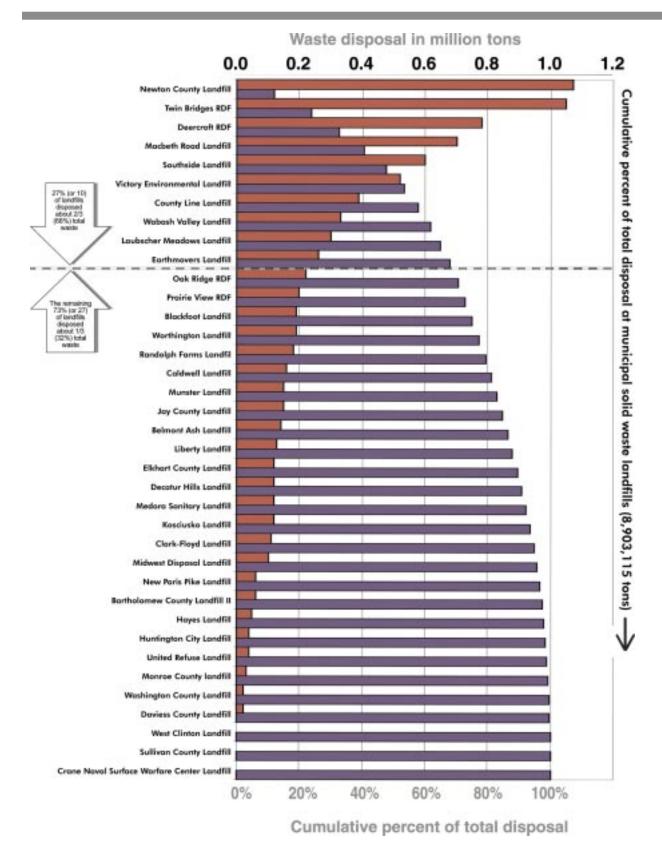


Figure 10 shows the distribution of disposal among MSW landfills. Note that almost one third (30% or 11) of MSW landfills accepted less than 100,000 tons of solid waste.

Figure 10.
Distribution of Disposal at Municipal Solid Waste Landfills During 2002



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Table 9 summarizes total disposal at individual MSW landfills during 2002. More detailed disposal data for all solid waste disposal facilities is given at the end of this report in "2002 Solid Waste Facility Profiles."

Table 9.

Total Disposal at Municipal Solid Waste Landfills During 2002

County Location of Facility	Facility Name	Waste Disposal in Tons	Number of Operating Days	Disposal per Operating Day (Tons)
Allen	Macbeth Road Landfill	709,260	307	2,310
Allen	United Refuse Landfill	41,589	149	279
Bartholomew	Bartholomew County Landfill II	66,472	302	220
Cass	Oak Ridge Recycling and Disposal Facility	228,515	280	816
Clark	Clark-Floyd Landfill	110,168	307	359
Clinton	Midwest Disposal Landfill	102,137	312	327
Daviess	Daviess County Landfill	21,176	300	71
Decatur	Decatur Hills Landfill	127,968	308	415
Elkhart	Earthmovers Landfill	269,803	307	879
Elkhart	Elkhart County Landfill	128,109	289	443
Fulton	County Line Landfill	395,923	307	1,290
Greene	Worthington Landfill	192,469	310	621
Hendricks	Twin Bridges Recycling and Disposal Facility	1,054,851	312	3,381
Henry	Hayes Landfill	50,113	307	163
Huntington	Huntington City Landfill	49,461	269	184
Jackson	Medora Sanitary Landfill	124,430	314	396
Jay	Jay County Landfill	155,570	294	529
Kosciusko	Kosciusko Landfill	121,434	255	476
Lake	Munster Landfill	157,587	261	604
La Porte	Deercroft Recycling and Disposal Facility	787,289	248	3,175
Marion	Southside Landfill	600,673	310	1,938
Marion	Belmont Ash Landfill	140,905	260	542
Martin	Crane Naval Surface Warfare Center Landfill	1,874	247	8
Monroe	Monroe County Landfill	32,622	307	106
Newton	Newton County Landfill Partnership	1,073,722	309	3,475
Pike	Blackfoot Landfill	196,624	308	638
Randolph	Randolph Farms Landfill	189,826	312	608
St. Joseph	Prairie View Recycling and Disposal Facility	204,303	257	795
Shelby	Caldwell Landfill	161,852	364	445
Sullivan	Sullivan County Landfill	3,162	256	12
Vanderburgh	Laubscher Meadows Landfill	308,604	306	1,009
Vermillion	West Clinton Landfill	7,285	306	24
Vigo	Victory Environmental Landfill	524,320	306	1,713
Wabash	Wabash Valley Landfill	334,964	307	1,091
Washington	Washington County Landfill	21,730	305	71
Wayne	New Paris Pike Landfill	67,658	247	274
White	Liberty Landfill	138,668	142	977
Total for all Mu	nicipal Solid Waste Landfills	8,903,115		

Other Solid Waste Land Disposal Facilities

Construction-Demolition Sites

Construction-demolition sites receive only construction and demolition waste as described in Table 2. As shown in Figure 11, these sites did not receive a significant amount of out-of-state waste until 1996, when the amount of out-of-state waste increased from 5 to 36 percent of total receipts. Percentages of out-of-state waste received by construction-demolition sites returned to their pre-1996 levels in 2000 and 2001 but increased again in 2002. Table 10 provides a listing of the construction-demolition landfills and the total amount of waste each facility received in 2002.



Figure 11.

Annual Disposal at Construction-Demolition Sites by Waste Origin

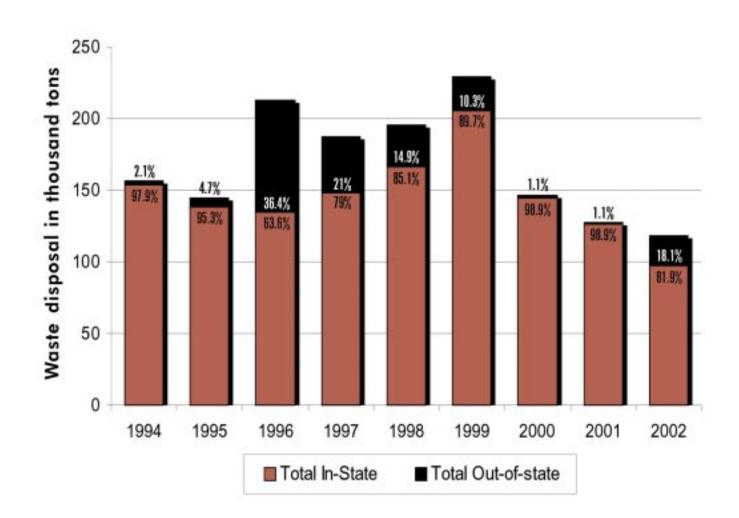


Table 10.

Total Disposal at Construction-Demolition Sites During 2002⁽¹⁾

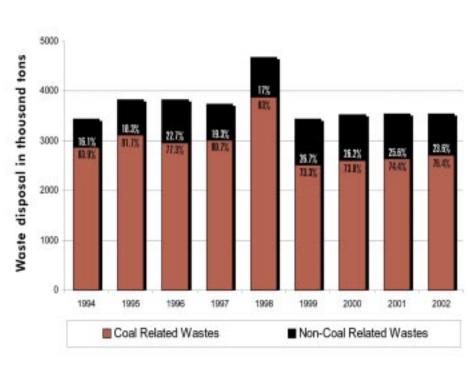
County Location of Facility	Facility Name	Waste Disposal In Tons		
Allen	M & M C/D Site	987		
Elkhart	Warner & Sons Inc. C/D Site	6,710		
Lake	Lake County C/D Site(2)	28,669		
Madison	Industrial Removal C/D Site	8,284		
Martin	Crane Naval Surface Warfare Center C/D Site	7,539		
Monroe	Monroe County SWMD C/D Site	24,604		
Pike	Velpen Solid C/D Site	13,601		
Posey	Springfield Environmental C/D Site	23,828		
Vermillion	West Clinton II C/D Site	4,442		
Total for All Construc	tion-Demolition Sites:	118,664		

⁽¹⁾ Purdue University C/D Site closed in 2001 and thus accepted no waste in 2002.

Restricted Waste Sites

Restricted waste sites also receive a limited range of wastes, as specified in their facility permits. Most sites are ash, sludge, or foundry monofills. Coal combustion wastes from power plants accounted for 76 percent of the total tonnage disposed at restricted waste sites in 2002 (Figure 12). Note that prior to 1996, coal combustion wastes were not individually reported waste types on the solid waste facility quarterly reporting program. Before 1996, the amount of coal-related wastes disposed was estimated based on the amount of waste received at specific types of restricted waste sites related to coal combustion.

Figure 12.
Annual Disposal at Restricted Waste Sites by Waste Type⁽¹⁾



(1) Percentages estimated 1994-1995.

⁽²⁾ Lake County C/D Site opened in 2002.

The total waste disposed each year in restricted waste sites is much larger than the amount received at construction-demolition sites, although not as large as the amount of waste received by municipal solid waste landfills (Figure 4).

No restricted waste sites have reported receiving out-ofstate waste since 1992. Table 11 provides a listing of the restricted waste sites and the total amount of waste each facility received during 2002.

Table 11.

Total Disposal at Restricted Waste Sites During 2002

County Location of Facility	Facility Name	Waste Disposal In Tons
Bartholomew	City Garage Site RWS 3	48,027
De Kalb	Auburn Foundry RWS 3	107,190
Fountain	Harrison Steel Cast RWS 3	46,833
Gibson	Gibson Station Scrubber RWS 2	1,178,368
Jasper	Schahfer FGD Sludge RWS 1	180,044
Jefferson	Clifty Creek Coal Ash Disposal RWS 3	124,130
Knox	Scepter Industries RWS 1	29,876
Kosciusko	Dalton Foundry RWS 3	77,184
_ake	U.S. Steel - Gary Works RWS 1	246,519
_awrence	Lehigh Portland Cement Co RWS 1	10,395
Noble	Dalton Corp. Kendallville Mfg. Fac. Monofill RWS 3	45,115
Perry	Waupaca Foundry RWS 3	160,291
Pike	Petersburg Generating Station RWS 3	7,750
Porter	Yard 520 RWS 3	0
Posey	SIGECO Filter Cake Disposal RWS 3	214,347
Spencer	Rockport Plant Ash RWS 2	152,291
Sullivan	Merom Station RWS 2	854,875
Wabash	Ford Meter Box RWS 3	2,903
Wabash	Wabash Alloys RWS 1	61,570
Total for All Restricted	Waste Sites:	3,547,708

Non-municipal Solid Waste Landfills

The 1996 rules introduced the terms municipal solid waste (MSW) landfill and non-municipal solid waste (Non-MSW) landfill, which have been used throughout this report. In previous reports, Non-MSW landfills were grouped with MSW landfills under the general heading of "sanitary landfills." MSW landfills were discussed earlier in this section. There are only a few Non-MSW landfills in Indiana and currently

all are captive facilities, not available for public use. They may receive any type of waste described in Table 2 except MSW, pursuant to the specifications of their permits. Table 12 provides a listing of the non-municipal solid waste landfills and the total amount of waste each facility received during 2002.

Table 12.

Total Disposal at Non-municipal Solid Waste Landfills During 2002⁽¹⁾

County Location of Facility	Facility Name	Waste Disposal In Tons
Monroe	Dillman Road WWTP Landfill	8,426
Putnam	Heritage Landfill	95,945
Vermillion	Inland Non-municipal Landfill	12,913
Total for All Non-municipal Solid Wast	117,284	

(1) ALCOA Sanitary Landfill closed in 2001 and thus accepted no waste in 2002.

Solid Waste Processing Facilities

Solid waste processing facilities include:

- solid waste incinerators;
- transfer stations; and
- other processing facilities.

Table 13 displays the amount of solid waste received by permitted Indiana incinerators (excluding small-capacity incinerators) and transfer stations by each reported waste type during 2002. Table 14 displays similar information from 1994 through 2002 for municipal and non-municipal waste. More detailed data for all solid waste processing facilities is given at the end of this report in "2002 Solid Waste Facility Profiles." Other processing facilities are discussed later in this section.

Table 13.

Solid Waste Received by Processing Facilities by Waste Type During 2002

Waste Type	Tons of Waste Received Incinerators ⁽¹⁾ Transfer Stations					
Municipal	646,621	2,384,806				
C/D	0	463,285				
Coal Ash	0	18				
FGDWaste	0	0				
Foundry	0	23				
Other Non-MSV	N 41,591	19,230				
TOTAL	688,212	2,867,362				

⁽¹⁾ Does not include small-capacity incinerators receiving less than 10 tons/day of solid waste or 7 tons/day of infectious waste.

Table 14.

Annual Amount of Solid Waste Received by Processing Facility Type and Waste Type (Includes waste imports to Indiana)

Facility Type	Waste Type		Tons of Waste Received							
		1994	1995	1996	1997	1998	1999	2000	2001	2002
Incinerators ⁽¹⁾	MSW NonMSW	687,198 21,318	668,499 22,439	689,859 22,839	681,147 28,183	670,380 25,552	669,718 27,901	632,880 28,672	636,072 30,274	646,621 41,591
	TOTAL	708,516	690,938	712,698	709,330	695,932	697,619	661,552	666,346	688,212
Transfer	MSW	1,210,393	1,409,747	1,434,712	1,523,836	1,753,009	1,935,432	2,230,153	2,282,366	2,384,806
Stations	NonMSW	206,450	184,807	291,183	404,897	476,100	474,227	499,069	470,251	482,556
	TOTAL	1,416,843	1,594,554	1,725,895	1,928,733	2,229,109	2,409,659	2,729,222	2,752,617	2,867,362

⁽¹⁾ Does not include small-capacity incinerators receiving less than 10 tons/day of solid waste or 7 tons/day of infectious waste.

Solid Waste Incinerators

For reporting and permitting purposes, solid waste incinerators are regarded as processing facilities. For solid waste planning and fee purposes, incinerators are considered final disposal facilities. Table 15 provides a list of the permitted solid waste incinerators that operated in 2002 and the total amount of solid waste received by these facilities. The list does not include the small-capacity incinerators in Indiana that are not required to report to IDEM.

Annually, Covanta Energy Indianapolis Resource Recovery Facility receives roughly five percent of the total tonnage of waste either land disposed or incinerated in Indiana. From the waste received by Covanta during 2002, there was about 168,500 tons of ash produced and delivered to the Belmont Ash Landfill or Southside Landfill for disposal. The ash produced is equivalent to about 25 percent of the waste received at Covanta.

Table 15.
Total Waste Received by Incinerators During 2002⁽¹⁾

County Location of Facility	Facility Name Wa	Waste Received In Tons		
Marion	Covanta Energy Indianapolis Resource Recovery Fa	cility 663,342		
Marion	Wishard Memorial Hospital	2,174		
Posey	General Electric Ultem Thermal Oxidizer System	22,696		
Total for All Incinerators		688,212		

(1) Wishard Memorial Hospital Incinerator opened in 2001 but did not begin accepting waste until 2002.

Transfer Stations

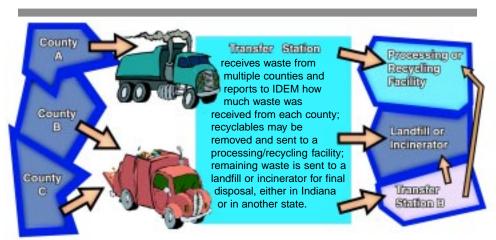
Transfer stations are facilities that allow waste from individual collection vehicles to be offloaded and then reloaded into larger vehicles for transport to final disposal facilities. Some transfer stations recover recyclable materials and send them to processing or recycling facilities.

The accountability for differences in incoming and outgoing waste at transfer stations has improved over the years. Although for the first few years of quarterly reporting there was no

mechanism to track such differences, reporting forms were improved to include materials recovery. Facilities are also required to submit written explanations if the difference between incoming and outgoing tonnage totals is due to a reason other than materials recovery. In most instances, these differences are the result of materials recovery or differences in volume-to-tons conversions.

As discussed on page 10, it is difficult to track the true origin of waste. Waste collection vehicles may transport their waste directly to a landfill or they may take it to a transfer station. A

Figure 13.
Transfer Station Waste Management



landfill receiving waste from a transfer station documents it as originating from the county in which the transfer station is located, regardless of whether any of the waste was generated in that county. The issue is further complicated when the transfer station receives waste from two or more counties, mixes the loads in a central location, removes various recyclables, then transports the waste to two or more landfills, another transfer station and/or a recycling facility. Figure 13 illustrates how the tonnage received from the counties may be known, but the waste sent for final disposal or processing may not directly identify the point of origin.

Table 16.

Destination of Waste Sent from Transfer Stations for Final Disposal

Year	Total Tons Sent To All Facilities	To Indian	a Facilities	To Out-of-State Facilities		
	10 / 111 / 401111100	Tonnage	% of Total	Tonnage	% of Total	
1994	1,319,874	1,172,664	88.8	147,210	11.2	
1995	1,519,856	1,344,676	88.5	175,180	11.5	
1996	1,639,145	1,468,074	89.6	171,071	10.4	
1997	1,835,145	1,629,723	88.8	205,422	11.2	
1998	2,131,526	1,917,838	90.0	213,688	10.0	
1999	2,317,959	2,059,268	88.8	258,691	11.2	
2000	2,577,813	2,268,754	88.0	309,059	12.0	
2001	2,638,995	2,303,805	87.3	335,190	12.7	
2002	2,737,515	2,377,746	86.9	359,770	13.1	

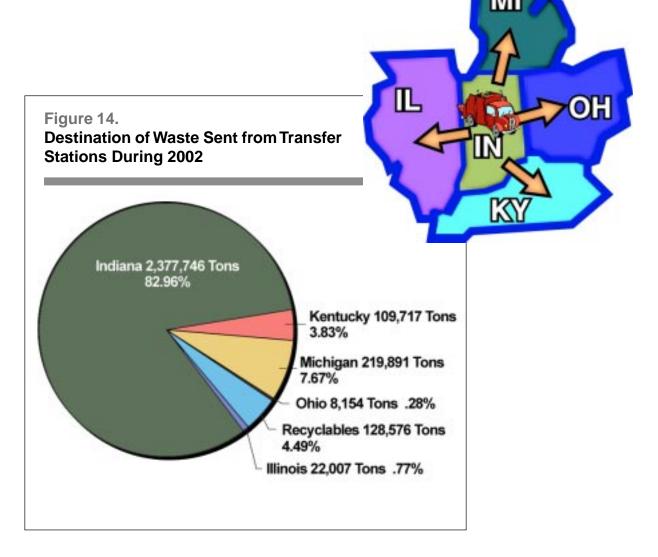
Quarterly reports from transfer stations currently provide the only source of systematic information on the amount of waste exported by Indiana. Table 16 shows the amount of waste sent out-of-state from transfer stations as compared with the amount of waste sent to Indiana final disposal facilities from 1994 to 2002. Figure 14 shows a more detailed breakdown of the destination information for 2002. This information does not provide a complete picture of Indiana waste exports because the totals in Table 16 are based only on information obtained from processing facility quarterly reports. The amount of waste hauled directly from an Indiana residence or business to an out-of-state destination is not adequately known due to reporting limitations.

More detailed data for transfer stations is given at the end of this report in "2002 Solid Waste Facility Profiles."

Other Processing Facilities

Other processing facilities permitted by IDEM could include paper and medical waste processing facilities. None of the facilities operating during 2002 are classified under this category.

IDEM issues permits to any solid waste processing facility upon which is located a solid waste incinerator, transfer station, solid waste baler, solid waste shredder, resource recovery system, composting facility, or garbage grinding facility (as defined in 329 IAC 11-2-43, unless excluded by 329 IAC 11-3-1).



Out-of-State Waste

Solid waste imported from out-of-state sources can be received at landfills, incinerators, or transfer stations. Historically, the predominant states of origin for solid waste imports have been the four states contiguous to Indiana (Illinois, Michigan, Ohio, and Kentucky). As Figure 15 shows, the portion of out-of-state waste originating from non-contiguous states has decreased dramatically since 1994, and by 1995 accounted for less than 1 percent of Indiana's total imports. In 1999, no waste was received from East Coast states and commonwealths for the first time since the implementation of facility quarterly reports. Less than 700 tons were received from New Jersey and Virginia in 2000, and about 17 tons were received from

New Jersey, Georgia, and Puerto Rico combined in 2001. In 2002, 17 tons were received from East Coast states and 584 tons were received from California. Figure 15 also shows that waste imports increased significantly in 1995 and doubled in 1996. Out-of-state waste received by Indiana facilities increased by 32 percent from 1996 to 1998 to their highest level since totals were reported (over 2.7 million tons). In 1999, out-of-state waste receipts decreased by about one million tons and stayed steady through 2002. In 2002, out-of-state waste accounted for 12 percent of the waste disposed at all of Indiana's disposal facilities and 18 percent of the waste disposed in MSW landfills.

Figure 15. Annual Waste Imports by Region of Origin

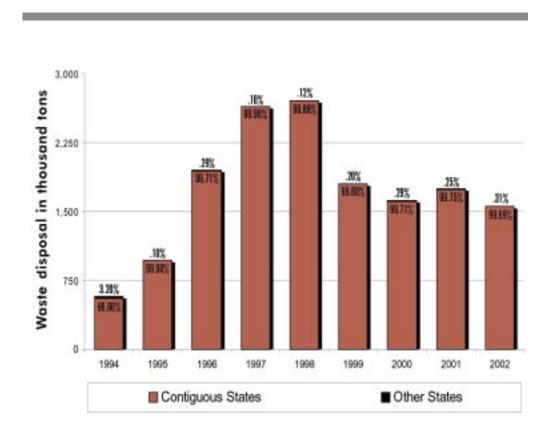


Table 17 details the state origin and amount of out-of-state waste received at Indiana solid waste facilities during 2002. Figure 16 shows this information from 1994 through 2002. Illinois has been historically the largest source of waste

imported to Indiana. In 2002, Illinois waste accounted for 88 percent of the out-of-state waste received by Indiana solid waste facilities. Eighty Seven percent of that waste came from the Chicago area.

Table 17.
Out-of-State Waste Received During 2002⁽¹⁾

Total Tons: 1,557,930

State	Tons	State	Tons	State	Tons	
County Name	Received	County Name	Received	County Name	Received	
■ Illinois	1,376,041	Kentucky	59,164	Wisconsin	472	
Champaign	77	Boone	638	Milwaukee	81	
Clark	3,474	Daviess	60	Ozaukee	30	
Clay	106	Hardin	1,117	Waukesha	361	
Clinton	12	Henderson	39,823	Texas	208	
Coles	7	Henry	2,401	Bexar	8	
Cook	1,195,979	Jefferson	12,739	Denton	192	
Crawford	16,886	Jessamine	2,238	Harris	8	
Cumberland	2	Meade	13	West Virginia	160	
DuPage	676	Mercer	12	Putnam	160	
Edgar	3,575	Montgomery	5	Pennsylvania	111	
Fayette	19	Nelson	5	Philadelphia	96	
Greene	7	Pulaski	16	York	15	
Hamilton	17	Whitley	97	Kansas	106	
Jasper	10	Ohio	39,248	Doniphan	92	
Kane	27	Allen	30	Johnson	8	
La Salle	2	Auglaize	424	Wyandotte	6	
La Salle Lake	10	Brown	7	• Nevada	82	
	11,552		72	Storey	16	
Lawrence	11,552	Cuyahoga Darke		•	24	
Livingston	-		3,175	Washoe		
Madison	94	Defiance	13	White Pine	42	
Marion	93	Franklin	40	Tennessee	61	
Montgomery	937	Hamilton	1,599	Lawrence	47	
Moultrie	378	Marion	222	Montgomery	14	
St. Clair	5	Mercer	7,127	Colorado	45	
UNKNOWN	132,673	Montgomery	61	Denver	45	
Vermillion	3,140	Muskingum	26	lowa	24	
Wabash	2,408	Paulding	4,127	Cerro Gordo	13	
White	4	Preble	194	Des Moines	1	
Will	3,746	Shelby	5,935	Lee	3	
Winnebago	13	Summit	11	Polk	7	
Michigan	78,596	UNKNOWN	402	South Dakota	22	
Berrien	3,343	Van Wert	15,469	Codington	22	
Branch	71,876	Warren	191	Arkansas	17	
Cass	2,447	Williams	61	Saline	14	
Genesee	28	Wood	61	Woodruff	3	
Jackson	29	Missouri	2,961	Georgia	8	
Kent	58	Audrain	29	Troup	8	
St. Joseph	438	Clay	86	Nebraska	8	
UNKNOWN	378	Henry	75	Lancaster	8	
		Jackson	1,821	New Jersey	8	
		Lincoln	214	Gloucester	8	
		St. Charles	7	Minnesota	4	
		St. Louis	703	Hennepin	4	
		UNKNOWN	26	New York	1	
			5 84			
		California		UNKNOWN	1	
		Los Angeles	576			
		San Diego	8			

 $^{^{(1)}}$ About 14,382 tons were sent back to out-of-state facilities by Indiana transfer stations.

Figure 16.
Annual Waste Imports by State of Origin

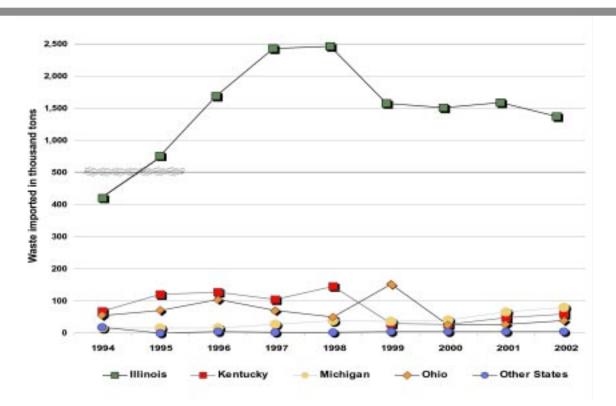


Table 18 displays the amount of out-of-state waste received by Indiana's permitted solid waste facilities by each reported waste type during 2002. Table 19 displays similar information from 1994 through 2002 for municipal and non-municipal waste. MSW landfills have consistently received most of the waste imported from other states.

Table 18.

Amount of Out-of-State Waste Received by Solid Waste Facilities by Facility Type and Waste Type During 2002

	Tons of Waste Received								
Waste Type	Municipal	Construction/	Non-MSW	Incinerators ¹	Transfer	All			
	Solid Waste	Demolition	Landfills		Stations ¹	Facilities			
	Landfills	Sites							
Municipal	1,249,114			1,345	69,136	1,319,595			
C/D	102,379	21,428			2,033	125,840			
Foundry	1,578					1,578			
Coal Ash	10					10			
FGD Waste						0			
Other NonMSW	91,920		4,491	14,451	45	110,907			
TOTAL	1,445,001	21,428	4,491	15,796	71,214	1,557,930			

¹ No processing facilities other than transfer stations and incinerators operated during 2002.

Figure 17 shows that municipal solid waste historically has accounted for the largest percentage of waste imports. However, non-municipal waste imports increased considerably between 1995 and 1998. This increase might have been due to imports of waste materials to be used as alternative daily cover by landfills. Alternative daily cover amounts were not included as waste in this report since 1999.

Figure 17.
Annual Amount of Out-of-State Waste Received by Solid Waste Facilities

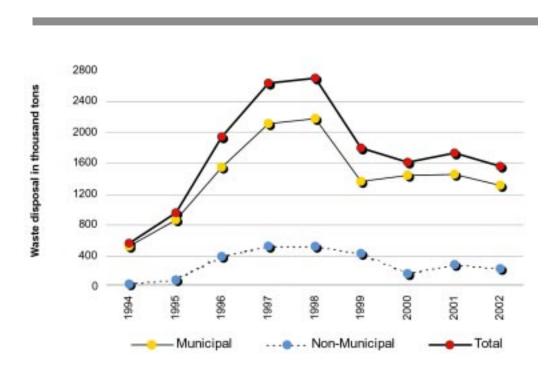


Table 19.

Annual Amount of Out-of-State Waste Received by Solid Waste Facilities by Facility Type and Waste Type

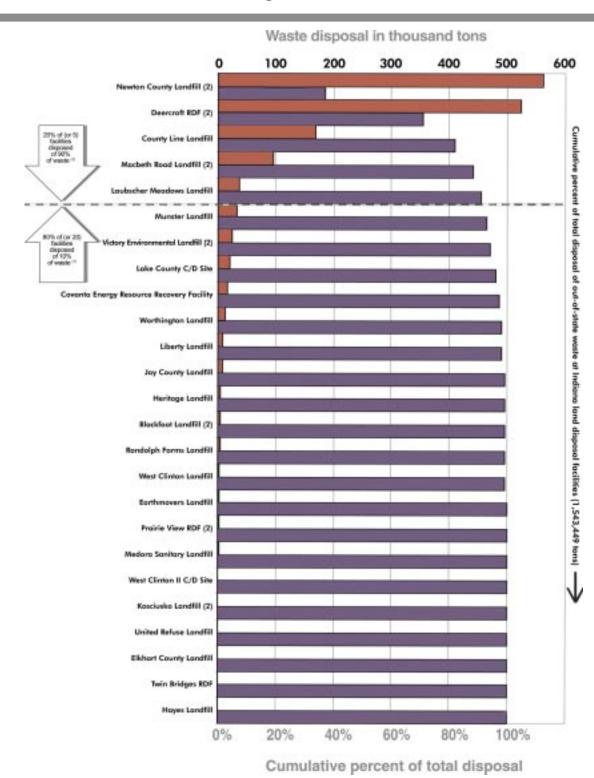
Landfill Type	Waste Type		Tons of Waste Received								
		1994	1995	1996	1997	1998	1999	2000	2001	2002	
Municipal	MSW	501,116	841,125	1,521,451	2,100,837	2,153,579	1,336,984	1,412,547	1,390,868	1,249,114	
Solid Waste	NonMSW	35,034	82,334	311,637	482,421	494,767	381,467	164,495	274,396	195,887	
Landfills ⁽¹⁾	TOTAL	536,150	923,459	1,833,088	2,583,258	2,648,346	1,718,451	1,577,042	1,665,264	1,445,001	
Construction/	MSW	0	0	0	0	0	0	0	0	0	
Demolition	NonMSW	3,297	6,775	77,398	39,468	29,234	23,578	1,560	1,416	21,428	
Sites	TOTAL	3,297	6,775	77,398	39,468	29,234	23,578	1,560	1,416	21,428	
Nonmunicipal	MSW	0	0	0	0	0	0	0	0	0	
Solid Waste	NonMSW	0	0	0	0	2,404	21,831	235	2,729	4,491	
Landfills	TOTAL	0	0	0	0	2,404	21,831	235	2,729	4,491	
Incinerators	MSW	2,409	2,560	7,777	5,228	5,488	11,603	9,851	11,815	1,345	
(nonhospital)	NonMSW	0	171	599	855	1,505	1,303	1,396	897	14,451	
	TOTAL	2,409	2,731	8,376	6,083	6,993	12,906	11,247	12,712	15,796	
Transfer	MSW	27,034	24,359	22,673	10,448	17,988	22,520	17,093	54,016	69,136	
Stations ⁽²⁾	NonMSW	640	6,621	604	519	737	683	4,724	3,641	2,078	
	TOTAL	27,674	30,980	23,277	10,967	18,725	23,203	21,817	57,657	71,214	
All	MSW	530,559	868,044	1,551,901	2,116,513	2,177,055	1,371,107	1,439,491	1,456,699	1,319,595	
Facilities	NonMSW	38,971	95,901	390,238	523,263	528,647	428,862	172,410	283,079	238,335	
	TOTAL	569,530	963,945	1,942,139	2,639,776	2,705,702	1,799,969	1,611,901	1,739,778	1,557,930	

⁽¹⁾ This reflects only out-of-state waste shipped directly to MSW landfills. Most of the out-of-state waste received by transfer stations was sent to Indiana MSW landfills for final disposal. However, these MSW landfills reported the origin of this out-of-state waste as the county in which the transfer station was located, rather than the state in which the waste originated, in accordance with IDEM guidance.

⁽²⁾ Between 1994 and 1996, the majority of this waste was sent to Indiana final disposal facilities. In 1997, 30% of out-of-state waste received by Indiana facilities was sent to either MI or KY facilities for disposal. In 1998, 45% was sent out-of-state for disposal, mostly to MI or KY. Transfer station exports began decreasing in 1999, and continued through 2001, when 3% (about 1,888 tons) of out-of-state waste received was sent to other states, mostly KY but also MI and OH. 2002 exports increased to over 20% (about 14,382 tons); however, all this increase was due to one transfer station in Clark County. Again, over 97% of exports went to KY, and the remainder went to MI and OH.

Figure 18 shows the distribution of the disposal of out-of-state waste among Indiana solid waste facilities. Of the 25 facilities that received out-of-state waste during 2002, five (20%) disposed of 90% of that waste. Over 90% of the imported waste received by these five facilities was from Illinois. The other 20 facilities (80%) disposed of the remaining 10% of the imported waste.

Figure 18. Distribution of Disposal of Out-of-State Waste Disposed at **Indiana Solid Waste Facilities During 2002**



⁽¹⁾ Percentages in the text boxes exclude facilities not taking out-of-state waste, therefore, they do not correspond exactly with percentages in Figure 10.

⁽²⁾ These landfills received out-of-state waste from Indiana transfer station(s).

Table 20 summarizes the annual amount of out-of-state waste received by Indiana's solid waste facilities during 2002. Table 21 provides a detailed look at the amount of waste that these facilities received from each state.

Although Indiana imports a considerable amount of solid waste, it also exports waste, primarily to contiguous states.

A brief discussion of waste exports was provided in the previous section on solid waste processing facilities (see page 26).

"2002 Solid Waste Facility Profiles" at the end of this report provides more detailed summaries of waste imports to landfills, incinerators, and transfer stations.

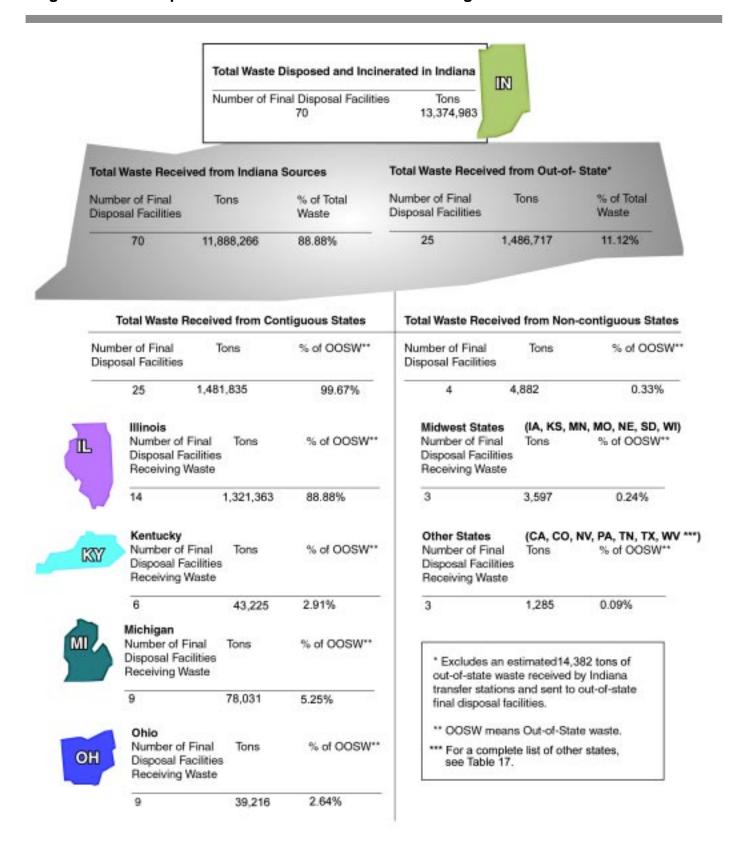
Table 20.

Total Out-of-State Waste Received by Facility During 2002

County Location of Facility	Facility Name	Type of Facility T	Tons of Out-of-State Waste Received		
Allen	Macbeth Road Landfill	MSW Landfill	96,834		
Allen	United Refuse Landfill	MSW Landfill	513		
Clark	Bi-Co Transfer Station	Transfer Station	12,727		
De Kalb	Merritt Processing Facility	Transfer Station	4		
Elkhart	Earthmovers Landfill	MSW Landfill	2,506		
Elkhart	Elkhart County Landfill	MSW Landfill	302		
Fulton	County Line Landfill	MSW Landfill	169,000		
Greene	Worthington Landfill	MSW Landfill	13,046		
Harrison	Gray Disposal Service Transfer Station	Transfer Station	14		
Hendricks	Twin Bridges Recycling and Disposal Facility	MSW Landfill	134		
Henry	Hayes Landfill	MSW Landfill	6		
Jackson	Medora Sanitary Landfill	MSW Landfill	1,554		
Jay	Jay County Landfill	MSW Landfill	7,693		
Knox	Jamax Transfer Station	Transfer Station	17,448		
Kosciusko	Kosciusko Landfill	MSW Landfill	509		
Lagrange	Scott Resource Recovery & Transfer Facility	Transfer Station	102		
Lake	Munster Landfill	MSW Landfill	33,029		
Lake	Illiana Transfer #1	Transfer Station	34,174		
Lake	Illiana Transfer #4	Transfer Station	5		
Lake	Lake County C/D Site	Construction/Demolition	Site 20,756		
La Porte	Deercroft Recycling and Disposal Facility	MSW Landfill	513,187		
Marion	Covanta Energy Indianapolis Resource Recovery Facility	Incinerator	15,796		
Newton	Newton County Landfill Partnership	MSW Landfill	547,819		
Noble	Kendallville Iron & Metal Transfer Station	Transfer Station	158		
Pike	Blackfoot Landfill	MSW Landfill	140		
Pike	Blackfoot Resource Recovery Facility	Transfer Station	45		
Porter	Able Disposal Recycling and TS	Transfer Station	441		
Putnam	Heritage Landfill	Non-MSW Landfill	4,491		
Randolph	Randolph Farms Landfill	MSW Landfill	3,238		
St. Joseph	Prairie View Recycling & Disposal Facility	MSW Landfill	2,434		
Vanderburgh	Laubscher Meadows Landfill	MSW Landfill	36,462		
Vanderburgh	Materials Recycling and Transfer Station	Transfer Station	3,227		
Vermillion	West Clinton II C/D Site	Construction/Demolition S	Site 672		
Vermillion	West Clinton Landfill	MSW Landfill	2,604		
Vigo	Victory Environmental Landfill	MSW Landfill	5,538		
Warren	Tri-County Transfer Station	Transfer Station	2,855		
Wayne	Richmond Transfer Station	Transfer Station	14		
White	Liberty Landfill	MSW Landfill	8,453		
Total for All Facilities	y		1,557,930		

Table 21.
Out-of-State Waste Received by Indiana Solid Waste Facilities During 2002

			» » Contiguous States « « » Other « » Total « % of Tota						
County Name	Facility Name	Facility Type	IL	KY	MI	ОН	States	Tons	Tons
Allen	Macbeth Road Landfill	MSW Landfill	0	0	71,645	25,189	0	96,834	6.2%
Allen	United Refuse Landfill	MSW Landfill	0	0	116	397	0	513	0.0%
Clark	Bi-Co Transfer Station	Transfer Station	0	12,727	0	0	0	12,727	0.8%
De Kalb	Merritt Processing Facility	Transfer Station	0	0	0	4	0	4	0.0%
Elkhart	Earthmovers Landfill	MSW Landfill	0	0	2,506	0	0	2,506	0.2%
Elkhart	Elkhart County Landfill	MSW Landfill	0	0	301	0	1	302	0.0%
Fulton	County Line Landfill	MSW Landfill	168,999	0	1	0	0	169,000	10.9%
Greene	Worthington Landfill	MSW Landfill	13,046	0	0	0	0	13,046	0.8%
Harrison	Gray Disposal Service Transfer Station	Transfer Station	0	14	0	0	0	14	0.0%
Hendricks	Twin Bridges Recycling and Disposal Facility	MSW Landfill	134	0	0	0	0	134	0.0%
Henry	Hayes Landfill	MSW Landfill	0	0	0	6	0	6	0.0%
Jackson	Medora Sanitary Landfill	MSW Landfill	0	572	0	982	0	1,554	0.1%
Jay	Jay County Landfill	MSW Landfill	0	0	0	7,693	0	7,693	0.5%
Knox	Jamax Transfer Station	Transfer Station	17,448	0	0	0	0	17,448	1.1%
Kosciusko	Kosciusko Landfill	MSW Landfill	0	0	107	402	0	509	0.0%
Lagrange	Scott Resource Recovery & Transfer Facility	Transfer Station	0	0	102	0	0	102	0.0%
Lake	Munster Landfill	MSW Landfill	33,029	0	0	0	0	33,029	2.1%
Lake	Illiana Transfer #1	Transfer Station	34,174	0	0	0	0	34,174	2.2%
Lake	Illiana Transfer #4	Transfer Station	5	0	0	0	0	5	0.0%
Lake	Lake County C/D SIte	Construction/Demolition	20,756	0	0	0	0	20,756	1.3%
La Porte	Deercroft Recycling and Disposal Facility	MSW Landfill	512,325	0	835	0	27	513,187	32.9%
Marion	Covanta Energy Indianapolis Resource Recovery Facility	Incinerator	4,214	5,908	86	1,254	4,334	15,796	1.0%
Newton	Newton County Landfill Partnership	MSW Landfill	547,819	0	0	0	0	547,819	35.2%
Noble	Kendallville Iron & Metal Transfer Station	Transfer Station	0	0	144	14	0	158	0.0%
Pike	Blackfoot Landfill	MSW Landfill	42	98	0	0	0	140	0.0%
Pike	Blackfoot Resource Recovery Facility	Transfer Station	45	0	0	0	0	45	0.0%
Porter	Able Disposal Recycling and Transfer Station	Transfer Station	122	0	319	0	0	441	0.0%
Putnam	Heritage Landfill	Non-MSW Landfill	3,750	167	0	54	520	4,491	0.3%
Randolph	Randolph Farms Landfill	MSW Landfill	0	0	0	3,238	0	3,238	0.2%
St.Joseph	Prairie View Recycling and Disposal Facility	MSW Landfill	0	0	2,434	0	0	2,434	0.2%
Vanderburgh Laubscher Meadows Landfill		MSW Landfill	0	36,462	0	0	0	36,462	2.3%
/anderburgh Materials Recycling and Transfer Station		Transfer Station	29	3,198	0	0	0	3,227	0.2%
Vermillion	West Clinton II C/D Site	Construction/Demolition	672	0	0	0	0	672	0.0%
Vermillion	West Clinton Landfill	MSW Landfill	2,604	0	0	0	0	2,604	0.2%
Vigo	Victory Environmental Landfill	MSW Landfill	5,520	18	0	0	0	5,538	0.4%
Warren	Tri-County Transfer Station	Transfer Station	2,855	0	0	0	0	2,855	0.2%
Wayne	Richmond Transfer Station	Transfer Station	0	0	0	14	0	14	0.0%
White	Liberty Landfill	MSW Landfill	8,453	0	0	0	0	8,453	0.5%
	Total for All Facilities		1,376,041	59,164	78,596	39,247	4,882	1,557,930	
								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	



2002

Summary of Indiana Solid Waste Facility Profiles

(ordered alphabetically by county location of facility)



Indiana Department of Environmental Management Office of Land Quality

100 North Senate AvenueP. O. Box 6015Indianapolis, Indiana 46206-6015